Summary of the
Field Measurements Committee Meeting
January 15, 1998

The Field Measurements Committee of the National Environmental Laboratory Accreditation Conference (NELAC) met on Thursday, January 15, 1998, at 9 a.m. Eastern Standard Time (EST) as part of the Third NELAC Interim Meeting in Arlington, VA. The meeting was led by its chair, Dr. Bart Simmons of the California Environmental Protection Agency. A list of action items is given in Attachment A. A list of participants is given in Attachment B.

INTRODUCTION

The Chair had the committee members introduce themselves. He explained the difference between an ad hoc committee and a standing committee. This committee may become a standing committee and may have no more than 10 members if the issue is presented and approved at the annual meeting.

STATUS OF PROPOSED CHANGES TO CONSTITUTION AND BY-LAWS

The NELAC Board of Directors has discussed and endorsed the need for a Sampling and Field Measurements (S&FM) Standing Committee. The board unanimously approved the need for inclusion of standing and field measurement information in NELAP. A White Paper is to be prepared per the board's request. A February 23, 1998, teleconference will be held by this committee. The chair noted three ways sampling and field measurement standards might be included in NELAC: (1) a separate, stand-alone chapter, (2) include standards in all chapters, (3) combination of the above two. Discussion ensued.

One participant believed that potential sampling and field measurement standards should have a separate section. Another said that sampling and field measurements are normally not done from a fixed laboratory, thus a separate chapter must be carefully constructed. ANSI/ASQC E4-1994 should be examined and used as appropriate. In dealing with field measurements, one has to be able to adapt that field lab to changes encountered. Technical and management systems should be put into place to be able to adapt. This suggests a combination of a separate chapter with references made to content of other chapters. Some concern was voiced about variances in quality control (QC) for field versus lab operations. Also, training and standard operating procedures (SOPs) are sometimes missing from field study organizations. The need for source sampling, continuous emission monitoring systems (CEMS), water analysis, and air emission sampling was noted.

The board wants feedback on how the standards should be structured. The Quality Systems Committee is looking for advice from this committee. The Navy applied ISO Guide 25 to sampling in the field, including documented information in SOPs. Chapter 5 of the NELAC Standards, Quality Systems, could be reworked, but wouldn't be as desirable as a separate section on Quality Systems for Field Measurements. Minor modifications to Chapter 5 and adding a supplement for field personnel qualifications, etc., were also discussed.

Proposed changes to the Constitution and By-Laws call for formation of a S&FM Committee which will develop and maintain standards and coordinate with other NELAC committees. Control points will be the committee which will reexamine Chapter 5 and the decisions of the States on whether to participate in NELAP. A "what if" question concerned the future possibility that EPA may adopt NELAC as national consensus standards and such an action would again affect States and their agencies. The Chair noted that the committee's goal at this point is to plan and develop good, workable standards for sampling and field measurements.

WHITE PAPER

The Chair asked for input from the committee on a white paper to present pros and cons on how to structure information on sampling and field measurements for the standards. A request was made that joint committee meetings be held to involve all stakeholders in writing the white paper. A participant asked that the cost impacts on labs, and the State's perspective (land and water sampling agencies) be considered. The committee also needs to consider the implications of EPA's adoption of performance-based measurement systems (PBMS).

NELAC must work with the top management of State agencies to build an understanding and agreement that sampling and field measurement standards will help document and improve the quality of their data.

A participant noted that agencies recognize that field sampling is sometimes the weak link in the overall quality picture. Some State agencies that would be affected by sampling and field measurement standards are not presently represented at NELAC. Neither are a number of engineering firms that do field sampling. A public information program may be needed to help determine whether to incorporate the sampling and field measurement standard into existing chapters or to let it stand alone. Thus an action item would be to get information out early to those who collect samples and analyze them in the field. State representatives attending NELAC should take the message back to their states. Another action item suggested was to confer with the Membership and Outreach Committee to publicize the idea of sampling and field measurement standards becoming included in NELAC. The Chair suggested participants get on the agenda of conferences of the engineering industry, publish articles in some of the trade journals, etc., for this purpose.

STATUS OF NAVY CHAPTER 25 STANDARDS

Much of the language from Navy Chapter 25 (sent to committee members and others earlier) could be abstracted for use in a NELAC standard for sampling and field measurements. A final version of Chapter 25 is to be released soon by the Navy to its labs and contractors. This release will begin the process of informing labs and engineering firms of the Navy's requirements. The Chair said that sampling and field measurement standards do not plan to certify personnel at present but would set training and experience requirements. The chair asked that comments based on review of the Navy Chapter 25 that apply to S&FM be sent to him prior to the June 1998 NELAC meeting and that he would incorporate them in his plans.

STATUS OF A2LA FIELD LABORATORY STANDARD

This standard is based on ISO Guide 25 which addresses mobile labs and field measurements. The chair called for comments. One comment was that the American Association for Laboratory Accreditation (A2LA) standard reaches well beyond the environmental area and some aspects have not been resolved.

STATUS OF AQME CRITERIA

A presentation of the criteria was made. An EPA document issued in December 1997 "Accreditation and Qualification Criteria for Measurement of Emissions: AQME Program," is on the NELAC web cite. Among other topics, the document's contents address accrediting a source testing firm based on personnel training and experience. It includes the process for being accredited and how the application will be evaluated. The concept of “key individuals” is put forward. Such key persons make the decisions and lead the field team; thus they are the ones who will be tested and qualified initially. A knowledge examination is included. The information in this document was offered as a first step in how to compose a set of standards that would include other sampling and field measurement areas other than source sampling (water, ambient air, etc.).

The chair asked for comments on where information given in the AQME document would fit in the NELAC Standards. Separate appendices for qualifications and equipment may be appropriate. Quality systems information could be incorporated into the existing Chapter 5. A participant suggested minimizing the amount of material put into the standard and to reference other documents for details. EPA has made presentations before the Engineering Foundation. Satellite broadcasts and presentations have also been made to American Industrial Hygiene Association (AIHA). Committee members offered to talk to state people and information could be distributed. The survey conducted last year could also be posted on the web.

STATUS OF EPA REGION IV ENFORCEMENT AND INVESTIGATIONS BRANCH SOP

The Region IV SOP is in its 4th edition; approximately 2,500 copies have been distributed. It has been used in training sessions for Region IV staff and others. The document is not prescriptive. Feedback is welcome and is incorporated. The document is a "living" one and is updated periodically. The latest edition includes a section on sampling strategy. The document is on the web site at the URL “www.epa.gov/Region4/SESD/EIB”. It is also available on 2 diskettes in WordPerfect 5.1 or 6.1 format. To obtain these diskettes, e-mail request to “cosgrove.bill@epamail.epa.gov” or call (706)355-8616. The document was offered to this committee for consideration. Lab SOPs may also be available.

Formal feedback from the committee on the EPA Region IV SOP was requested. It was noted that RCRA regulations require written Sampling and Analysis Plans (SAPs). A committee member noted that care needs to be taken with the semantics of what the documents are called and which are put into the standards. A NELAC standard should not specify on how to do things. This should occur in SOPs and SAPs which can be referenced. The committee must be clear on how to use and refer to the various technical and managerial guidance documents and be

consistent with all NELAC committees. ISO Guide 25 is a good way to start to relate documents to one another. Additional definitions may be needed to clear up confusion about the several documents. The chair believes the field measurements community must have SOPs, and that NELAC standards will make reference to SOPs to use as examples. The standards could state the required elements that should be in SOPs. The chair charged the committee with reviewing the array of documents to determine which are most useful as "core" documents and to exercise care in what is referenced in any sampling and field measurement standard. California EPA has produced a document and it could be put on the web. State engineering firms and state personnel may be caught "off base" and addition of sampling and field measurement standards may require discussion for general acceptance.

WHO HAS NOT BEEN INCLUDED IN NELAC S&FM DISCUSSION?

1. Geological sampling firms. Some engineering firms.

2. State Departments of Agriculture, Land and Soil, etc.

OUTREACH TO THOSE NOT AWARE OF NELAC/NELAP

1. Attend conferences and make presentations on NELAC: what it is and its content.

2. Approach major corporations in the various states, especially those who have their own environmental labs and/or consultants.

3. Discuss NELAC sanitary sewer districts and water treatment districts.

4. A Notice of Intent could be published in the Federal Register. The NELAC Board should be consulted regarding this.

5. Present the information “as an invitation to participate”. Some stakeholders perceive that NELAP is a closed society. Put this on the Membership and Outreach Committee Agenda for consideration and feedback of their findings.

Attachment A

ACTION ITEMS
Field Measurements Committee
January 15, 1998

Item No.	Action Item	Date to be Completed
1.	Comments on the various documents mentioned today	
2.	Provide input on the White Paper, with pros and cons on how to prepare standards. Distribute draft to other Committee chairs prior to the Board	
3.	Review SOPs and QA manuals to look for key elements for Standards; also look for referenceable documents	
4.	Put documents on the websites	
5.	Federal Register Notice of Intent	
6.	Other outreach to potentially affected organizations	

Attachment B

PARTICIPANTS
Field Measurements Committee
January 15, 1998

Name	Affiliation	Phone Numbers
Dr. Barton Simmons, Chair	California EPA	T: 510-540-3112 F: 510-540-2305 E:
Ms. Ann Marie Allen	Massachusetts Department of Environmental Protection	T: 508-682-5237 F: 508-688-0352 E: Ann.Marie.Allen@state.ma.us
Ms. Diana Baldi (absent)	Novartis, Crop Protection Division	T: 910-632-6000 F: 910-632-2048 E:
Mr. Dan Bivins	U.S. Environmental Protection Agency	T: 919-541-5244 F: 919-541-1039 E: bivins.dan@epamail.epa.gov
Ms. Maude Bullock (absent)	U.S. Navy	T: 703-602-1738 F: 703-602-5547 E:
Dr. Kevin Coats	U.S. Army Engineering Division	T: 402-697-2563 F: 402-697-2595 E: kevin.h.coats@usace.army.mil
Mr. Bill Cosgrove	U.S. Environmental Protection Agency, Athens, GA	T: 706-355-8616 F: 706-355-8744 E: cosgrove.bill@epamail.epa.gov
Ms. Joan Fisk	U.S. EPA Office of Solid Waste and Emergency Response	T: F: E: fisk.joan@epamail.epa.gov
Mr. Thomas L. Francoeur (absent)	Atlantic ECOTEC, Inc.	T :207-829-6752 F: 207-829-6754 E:
Mr. Cliff Glowacki	Ashland Chemical	T: F: E: clifford_glowacki%AshChem@notesgw.compuserve.com
Mr. John Hosenfeld	Midwest Research Institute	T: 816-753-7600 x1336 F: 816-531-0315 E: jhosenfeld@mriresearch.org
Ms. Marlene Moore	Advanced Systems, Inc.	T: 302-834-9796 F: 302-995-1086 E: mmoore@advancedsys.com
Mr. Wynand H. Nimmo (absent)	Arizona State Department of Health Services	T: 602-255-3454 F: 602-255-3452 E:
Ms. Colleen F. Petullo	U.S. Environmental Protection Agency, Las Vegas, NV	T: 702-798-2446 F: 702-798-2465 E: petullo@aol.com
Dr. Cary Eaton (Contractor Support)	Research Triangle Institute	T: 919-541-6720 F: 919-541-7215 E: wce@rti.org